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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,887	10/20/2003	Makoto Mikuriya	1163-0472P	2086

2292 7590 04/10/2007
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

PIPALA, EDWARD J

ART UNIT	PAPER NUMBER
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3663

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/10/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/10/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/687,887

Applicant(s)

MIKURIYA ET AL.

Examiner

Edward Pipala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to Applicant's request for continuing examination filed on 2/23/07.

Claims 1-8 are presently pending.

Claims 5-7 have been withdrawn from consideration.

The previous rejection of claims 1-4 and 8 under 35 U.S.C. 102(e) is withdrawn.

Claim Rejections – 35 USC § 112 2nd

2. Claims 2 and 4 are rejected under 35 U.S.C. 112 2nd for failing to particularly point out and distinctly claim Applicants invention.

It is believed that in claim 2, line 3, that "part" should be replaced with "parts", as previously recited in line 2.

Claim 4 is considered to be indefinite in that Applicant begins by reciting "a map processing apparatus" in the preamble, but then in line 15 Applicant further recites "providing update operation information", which is a method type limitation and therefore Applicant is attempting to claim both a method and apparatus in the same claim thereby rendering the claim indefinite by mixing the statutory classes of invention.

The issue with such mixing of statutory classes of invention is that it then becomes difficult to determine the metes and bounds of the claimed invention with respect to whether an apparatus or a method is being claimed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. (6,868,334) in view of Hunzinger (7,079,946).

Nakane et al. discloses a map data providing apparatus for a map data storage apparatus in which a map data storage medium with which a user connects to a map data providing center to download necessary data as needed. Figure 5 shows the contents of the data structure for the mesh data, which includes road data, background data, as well as auxiliary data, all of which provide the node and link data necessary for representing the map data mesh. Nakane et al. does not particularly disclose keeping track of link validity information with respect to the updating of the map data.

Hunzinger discloses iterative renewal of a map database in which individual road sections are identified or represented by at least one road intersection in the navigation database as shown in figure 9, where a list of add/delete instructions as well as new road/intersection information is contained.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented the node/intersection validity testing disclosed by Hunzinger, within the context of the map data updating system of Nakane et al., because both Nakane et al. and Hunzinger are capable of updating a map database by

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means of updated data patches for particular locations when new data is known to be available.

With respect to claim 1, the above combination of Nakane et al. and Hunzinger provides for a computer readable data architecture for storing map data on a medium in which node/link data as well as validity information are updated for individual node/link data.

With respect to claim 2, and wherein the map data comprises a plurality of data parts, please see at least figure 5 of Nakane et al. which discloses that the map data includes 1) road data, 2) background data and 3) auxiliary data.

With respect to claims 3, 4 and 8 reciting a method of designating and updating map data, and claim 4 which recites that the map data apparatus includes a storage unit, a receiving unit and a transmitting unit, please see at least figures 1 and 2 of Nakane et al., where Fig. 1 shows transmitting and receiving sections for providing the map data to a vehicle by wireless transmission, and Fig. 2 shows a schematic diagram the components of the navigation apparatus in the vehicle.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Pipala whose telephone number is 571-272-1360. The examiner can normally be reached on M-F 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



EJP



JACK KEITH
SUPERVISORY PATENT EXAMINER